

JOURNALISM DEMANDS COLLEGE-TRAINED MEN

President Hill Says This Profession Has Right to Expect to Recruit Its Ranks From University Output.

(Continued from Third Page.)

ture of the best minds among the young men and women of the State would seem to come professional training for those who are to be in a special sense the bearers of this culture to the rising generation, the public school teachers. "The function of a University," said the noted educator, Sir Joshua Fitch, "is to teach and to train teachers." Without attempting here to discuss the limitations of this statement, it seems to me self-evident that no State University can count itself truly a part of the public school system that does not regard it as one of its primary functions to equip men and women for leadership in the great work of public education, as it is represented in the elementary and secondary schools of the State. So thought the founders of the University of Missouri. President Lathrop, during the year which saw the dedication of the first building, 1843, urged upon the Legislature the Curators the importance of making special provision for the professional training of teachers here, and the Father of the University, Honorable James S. Rollins of Columbia, introduced and supported to its final passage in the Legislature of 1867 a bill to establish a Normal Department, as the first professional school of this University.

GROWTH OF THE NORMAL DEPARTMENT IN UNIVERSITY

That the Legislature of 1867 was conscious of the significance of this new Department and that the people expected the University to exert through it a wholesome and uplifting influence upon the schools of the State, is indicated by the fact that at the same session there was made to the University an annual grant of 1-1/3 per cent of the State revenue, after deducting therefrom 25 per cent for the support of common schools, the first grant made by the State itself for the support of its University. The establishment of the Normal Department here was also the first step taken by the State to provide professional training for Missouri school teachers. It antedates the State Normal Schools of this State and was the first Department of its kind in America to be established as co-ordinate in rank with other Schools of the University.

Amid varying fortunes and under various names, this Department has been ever since maintained by the University and has rendered a valuable educational service to the State, but it remained for the administration of President R. H. Jesse to fully realize the responsibility of the University in the preparation of teachers, and the necessity as well as wisdom of strengthening this old Department. In 1904 it was reorganized as the Teachers College, its courses were put upon a scientific basis in keeping with modern university spirit, its degrees made the full equivalent of other university degrees, and its activities greatly extended. That its recent service to the educational system of the State has been much appreciated by the school teachers and intelligent citizens of Missouri there can be no doubt, and properly supported and wisely directed there are virtually no limits to its possibilities of service. But the Teachers College cannot supply more than a small fraction of the four thousand new teachers that must every year be recruited for the schools of this great State, and the State has wisely established a State Normal School in each of its main geographical divisions. Being in a position to admit students of less scholastic preparation than is possible for the University, and being located in the very heart of the communities which they are intended to especially serve, these Normal Schools can do a work which no other element in the school system can so well accomplish, and they and the University should work together practically as a single institution for the improvement of the whole system of public schools supported by the State. The University should be prepared to offer the most advanced professional and academic courses for normal school graduates, as for the graduates of the colleges who wish to take up the work of teaching in the public schools.

STRUGGLE AT FOUNDATION OF AGRICULTURAL COLLEGE

But while the people of this State believe with Plato that the divinest things are the most servicable, they also planned, to have taught in the University whatever branches of knowledge might prove "useful in the practical arts and business of life." And when they turned to the consideration of how instruction in the University might be made a means of developing the State's industries, what more natural than that they should think first of instruction in Agriculture, the greatest industry and source of wealth in the State? The establishment of the Agricultural College as a Department of the State University was

foreshadowed in the addresses of the first President and discussions in the Board of Curators, but its realization was made possible only when Congress passed the Morrill Act providing for the donation of public lands for a college in each State, whose object should be the teaching of "such branches of learning as are related to agriculture and the mechanic arts." After a long-continued and bitter struggle this College was in 1870 located at Columbia "as a distinct Department of the University," by an act of the Legislature which has proved a god-send to both the University and the State. Even the discussion which the long contest gave rise to, in the newspapers, in educational journals, in lectures, on the stump and before the Legislature, aroused public thought on educational matters and educated the people to a larger and truer conception of the State University. It amounted to little less than a second founding of the whole institution.

In accepting the Land Grant, the State of Missouri became responsible for the administration of the funds, the supervision and control of the instruction, and for supplementing the congressional grant not only by the erection and maintenance of buildings and equipment, but also, it is clearly implied, by additional endowments for purposes of instruction. She has kept faith with the Federal Government and has made increasing appropriations for the furtherance of the objects aimed at in the establishment of this College of Agriculture. But the Federal Government also went further and later provided by the second Morrill Act and still more recently by the Nelson Amendment, for annual appropriations from Congress in support of agricultural education in each state that exceeded the total income of many a reputable college.

NORMAN J. COLMAN'S WORK HIGHLY PRAISED

But in some senses the most significant Act of Congress in behalf of the agricultural interests of the country and of higher education in the science of agriculture, was the Hatch Act of 1887 which provided for the establishment and support of agricultural experiment stations in every state, "so that practical and scientific agriculture could walk hand in hand," as the originator of the plan tells us, and as we know from the results, so that discovery in agricultural science might be stimulated and its results reported promptly and directly to the farmers of the State. This establishment was made possible through the force, eloquence, and insight of one who was for fifteen years a member of the Board of Curators of this University, an honored citizen of Missouri, and the first Secretary of Agriculture for the United States—Honorable Norman J. Colman of St. Louis. The establishment of the Experiment Station within the College of Agriculture introduced a new spirit into the work and marked the beginning of investigations that have brought fame to the College of Agriculture and saved this State and the Southwest millions of dollars, and contributed in no slight degree to the growth of that spirit of discovery that is coming now to permeate every department of the University and is to be its most distinguishing characteristic in the future.

The College of Agriculture has contributed to the wealth of Missouri much more than its total cost to the State and Federal governments combined, and the present work is but a promise of what it is capable of doing in the future. Take for instance the State Soil Survey which is now in progress, which aims to determine accurately the various types of soil in the State, their chemical composition and physical characteristics, and their adaptability to various plants, to crop rotations, and to different systems of farming. Samples of these soils are analyzed and their origin and past history studied. Definite field experiments are now in progress on the principal soil types which are most urgently in need of attention, for determination of the particular fertilizers, renovating crops, and systems of rotation which could be counted on to produce the greatest economic results. Experiments have also been instituted to ascertain the cost, the feasibility, and profitability of tile drainage for certain areas in the State.

VALUE OF SCIENTIFIC STUDY OF AGRICULTURE

When this piece of investigation is complete, the College of Agriculture will be able to inform any community in the State what system of farming, what kind of fertilizers, etc., will be most profitable, and the results, if heeded by the people, will add enormously to Missouri's wealth. Experiments of similar significance are also in progress along lines affecting the live stock and dairy interests of the State, some of them in co-operation with the United States Department of Agriculture, and results of great value are in sight if the means are provided for carrying these experiments

on to a successful issue. All this in addition to the instruction that is furnished to large numbers of Missouri young men in the scientific and practical phases of agriculture. May I not quote with approval the words of the last report made by the State Board of Agriculture: "In the heart of the greatest agricultural region in the world, the Mississippi Valley, will grow up in the near future the greatest agricultural college in the world. Missouri, one of the richest of these States, with a more diversified agriculture than any other, and with the most central location, is peculiarly well suited to build such a college."

But we must do more than build here a great College of Agriculture. We must adapt the scientific results achieved to the needs of those living on the soil. While maintaining the high standards of scholarship that have been wisely adopted for those students who take the degree, we must seek to educate a much larger number of young men in modern methods of agriculture than can spend four years here after completing a high school course. We must expand and make still more attractive our short winter courses and carry the gospel of scientific agriculture, both by bulletins and by extension lecturers, to the four corners of the State. Nor should the college of Agriculture count its field limited to that which concerns the cultivation of the soil and the care of live stock, but joining hands with the Teachers College and the State Normal Schools it should help devise and execute plans for the improvement of rural education, and stimulate local initiative and local ambition for all that pertains to the welfare of rural life and rural institutions.

GROWTH OF SCHOOL OF MINES AT ROLLA

Next to the agricultural resources of Missouri stands her mineral wealth, in coal, iron, lead, zinc, lime, barites, clays, and building stone, and the wisdom of the Fathers was shown in the provision made by the same Legislature for the establishment of a School of Mines and Metallurgy as well as a College of Agriculture and Mechanic Arts. There was thus fulfilled the interesting prophecy of the explorer and scientist, Henry R. Schoolcraft, in 1819: "There should be a mineralogical school located in Missouri. . . . Any one who is cognizant of the advantages which various parts of Germany and particularly Saxony, have derived from such a school, will not deny the utility of a similar one in the United States, and as to its location there can be no question, for, compared with any other part of the Union this will be found the land of ores, the country of minerals. . . . Every day in developing to us the vast resources of this country in minerals, particularly in lead, and we cannot resist the belief that in riches and extent the mines of Missouri are paralleled by no other district in the world." Opened in 1871 at Rolla as a Department of the State University, the School of Mines has justly taken high rank among the mining schools of America, draws a large number of students from other States, is now probably better equipped materially for its special work than any other Department of the University, was never better administered than it is today, and its future value to the State cannot be doubted. The lines of its development seem to be indicated by two significant facts that have shown themselves for the first time this year: a relatively large number of young men who had secured their fundamental scientific training in the Departments at Columbia where it can be much better given, transferred to Rolla for their special work in Mining; and a large enrollment of graduate students gives a higher scientific tone to all its technical work. To realize fully the purpose of its establishment, the School needs some additional buildings and equipment and funds to pay much better salaries to its Faculty.

JOURNALISM'S DEMAND FOR EDUCATED MEN

But the University of the people must include scientific preparation for any department of our community life, for the successful prosecution of which an extensive training is desirable. We must add, therefore, from time to time schools which will take care of the new professions as they may appear. We have for some time provided for the training of lawyers, physicians, agriculturists, and engineers; and only this year in response to insistent calls from students with that field in view, the University has made provision for the training of journalists. This great profession, large in numbers and important in influence, has a right to expect to recruit its ranks from university trained men, and I am hopeful of the service which the School of Journalism of this University will render to the advancing and complex civilization of Missouri. What other professional schools we will need to add to our organization, only time and the changing and growing demands of a progressive civilization can determine. We must stand ready to meet the needs of the people and trust to the people to support the forms of training that minister to their intellectual, social and economic needs.

HOW LAW DEPARTMENT RAISES LEGAL STANDARDS

The Law Department has been maintained at very slight cost to the State ever since 1872, and its graduates by the hundred have rendered valuable service to the communities in which they have settled and to the whole State in the halls of Legislature and the offices of government. It has led the standards of legal education in Missouri and exerted a wholesome influence in favor of higher standards of admission to the bar of the State.

I said earlier that in its fundamental courses the University must permit no gap to exist between her work and that of the good secondary schools, but this does not prevent her from requiring of her students the completion of a sound general training before permitting them to pursue special and professional courses. The institution that furnishes the best legal education in the commonwealth practically free of cost, can afford to demand of her students that thorough training in habits of logical thinking and that knowledge of political institutions that will give her graduates the power to take positions of leadership in the practice of their profession, and the social efficiency which is the justification of the State's expenditure. Contrary to the opinion of some who think that an institution supported by the people in their corporate capacity can never attain to the standards of a true university, I hold it to be the supreme privilege and the prime duty of

a free State University to maintain the highest standards of graduation in her professional schools that the civilization of the time may demand, for by so doing she will render the largest service to the people of the State.

DEPARTMENT OF MEDICINE NEEDS BETTER FACILITIES

Nothing can be of greater concern to a State than the health of her people, and Schools of Medicine were among the first products of a demand for higher education. In the field of medicine, if anywhere, it is important that rule of thumb should give place to scientific knowledge. The Medical Department of this University was established in 1873 and though it has suffered from prejudices and cramped resources, it has performed an honorable service to the State. Now, to my mind, if the State requires an examination of proficiency from anybody as a condition of practicing any profession, it should itself provide the institution properly equipped, where the requisite training can be obtained. It is to be hoped that the State of Missouri will promptly take measures to provide greater facilities for the training of her physicians and that the Medical Department of the State University, whose ideals and standards are now high, may be able to still further raise its standards and increase its usefulness to the people of the State.

The recent industrial development of Missouri has led to a demand upon the State's highest educational institution for men trained in civil, electrical and mechanical engineering. The power plant manager, the engine builder, the electric and steam railroad contractor and manager, the cement manufacturer, and all the great industrial interests of the State turn to the University for help, appealing not only for trained employees, but for expert advice also. The School of Engineering which was at first a division of the College of Agriculture and Mechanic Arts, thus came to assume the importance that demanded its establishment as a distinct Department of the University. The value of this School to the rapidly developing industries of the State can hardly be overestimated. The industries of the State and the School of Engineering are in fact but two different parts of the same thing. The development of this School has also contributed to University life by bringing to Columbia a large number of our most earnest students, and by inspiring them with ideals of efficiency that are wholesome antidotes to any malarial tendency that might creep into the University atmosphere. Our technical instruction in Engineering is good. Let it be still further improved. And let us also remember that the engineer should also be a man, and not only that, if he is to be a leader in his profession, he must also be a leader of men. The courses here now require the fundamental sciences, English, and economics. Would it not be well to still further improve them by lengthening them somewhat so as to provide more liberal and humanistic training for citizen engineers?

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A People's University must thus be a very complex institution and furnish a varied programme of instruction. It must be dedicated both to truth and to utility, and while cherishing the old, it must always be in pursuit of something better. But this scope of instruction and progressiveness of spirit bring with them one serious embarrassment. The natural equipment necessary for the old college was small and inexpensive. A few rooms, a few books, and a small teaching staff were all that was necessary. But modern scholarship is a scholarship of investigation, and investigation requires vast resources in the way of apparatus, libraries, laboratories, and museums. These resources are as indispensable to modern higher education as are machines to modern industry. Mark Hopkins at one end of a log and a student at the other would hardly constitute a modern university, even if both were geniuses.

UNIVERSITY BELONGS TO ALL THE PEOPLE

Further, no higher education can be self-sustaining. This is a recognized

condition of civilization everywhere, and one that is accepted by all enlightened people. Exclusive of permanent endowments, a tuition fee of three hundred dollars a year would be necessary in the best universities of America, if the costs were to be defrayed by the students alone. In the University of Missouri we expend much less than that amount on each student, in fact less than is spent in any university of equal recognized standing in the country, but I do not point to the fact with pride. Missouri has generously agreed to make the education offered by the University free to rich and poor alike, and this provision imposes a great obligation on the legislature itself, for every addition to the number of our students or improvement in our work, is an additional call for legislative appropriations. The University does not belong to the Curators; still less does it belong to the President. It belongs to the people of Missouri and we are the administrators of a trust. It is, therefore, our duty to report from time to time to the people's representatives the ways in which, according to our judgment, the University can be improved and made more efficient. At the risk of making still further drafts upon your patience, I must say a word in regard to some of our most pressing needs.

In the most literal sense, it is the instructing staff that makes a university, for buildings and appliances are only means to enable the teacher to do his work efficiently. I believe the teacher's calling is the highest among men, but it is usually the worst paid; and as the customary remuneration in a profession is liable to determine the estimation in which that profession is held, the State will suffer detriment if the best minds are deterred from the profession of teaching by the social attitude incident to a low scale of salaries. Besides, there must always be a measure of competition in the employment of teachers as in other concerns, and this University cannot hope to secure and retain the ablest teachers for the young men and women of Missouri unless she can pay salaries equal to those paid by other institutions of her class.

PUTS FACULTY ABOVE BUILDING EQUIPMENT

I consider it the greatest glory of the administration of President Jesse that he worked persistently, perhaps more persistently than any other university President in America, to secure and retain here the ablest professors that were available from any quarter of the globe with the resources at his command. I shall seek to follow his policy in this regard, for the fruits of it are patent to every one familiar with the University of Missouri. So to the people, I would say, force us to work here in poor buildings if you must, but for the sake of the youth of Missouri, give us men!

But even great teachers cannot entirely overcome the handicap of meagre equipment in libraries and laboratories. A college may be successful with a comparatively small library, but to a university a large and increasing collection of books and periodicals is a necessity. A university is an organization for the discovery and the promulgation of truth. The best that has been done in the past is embodied in the literature of the various subjects, and every investigator must know what has been done before, if he would know whether he is finding what is new. And as for the students, in proportion as they advance into the higher realms of knowledge, in the same proportion does the teacher's service to them become less and less that of the dogmatist, and more and more that of one who simply points out the way and guides them in their own independent investigations. Everywhere a generous store of books has been considered a provision of the most fundamental importance. For instance, the University of Strasburg, which is one of the newest establishments in Germany, did not think of beginning instruction till it had collected a quarter of a million volumes, and this collection has been constantly added to ever since. The present library facilities of the University of Missouri are altogether inadequate, and what has been said about the library, both as to importance and present inadequacy, can be said of the laboratories of both the pure and applied sciences.

POINTS OUT NEED FOR NEW LIBRARY BUILDING

In the matter of buildings, the most pressing need is for a library building, of fire-proof construction, in which to preserve and make better use of the present collections of the university and of the State Historical Society, and provide for their future growth. It is false economy for the State to expose to risk of fire the valuable collections that are now housed in this Academic Hall and in other buildings on the campus, many of the pamphlets especially being impossible of reproduction in case of loss, and the space now occupied by stacks and reading rooms is sorely needed for class room purposes. The Engineering Building is overcrowded and ill-adapted for the purposes of one of the fundamental scientific laboratories now quartered there. Physics is the most fundamental of sciences, and yet it is the one science taught on this campus that has no building provided especially for its use. The Chemistry Building, never well suited for the purpose, has been entirely outgrown by the rapid increase in the number of students that from neces-

sity or choice seek to take advantage of the courses in that science. At the State Farm, Veterinary Science finds its work divided between practically all of the agricultural buildings, and the necessity of bringing diseased animals for study into the Live Stock Judging Pavilion is a menace to the health of the most valuable animals in the herd; the Dairy Department needs a more suitable barn for its purposes, for the State Dairy Association has declared that there is not a herd of dairy cattle of equal value in the State kept in such an inferior barn, and this department is naturally looked to by dairymen to furnish an example of appropriate sanitary conditions for the production of milk; the Department of Animal Husbandry finds its present Live Stock Judging Pavilion completely outgrown because of the increased enrollment, and though Missouri is one of the leading horse rearing States in the Union, no building has yet been provided by the State for the stabling of horses to enable the department to adequately carry on its experiments in breeding and feeding; and the Horticultural Building was outgrown a year after it was opened, so that the work in Botany should be withdrawn from that building at an early date and a new building be provided for the fundamental Biological Sciences. The Teachers College needs a building in which to conduct its classes for observation and practice, which are as essential to its efficiency as laboratories for the physical sciences, and because of the lack of such a building it has been forced to rent property in town in order to carry on its work.

IN FIVE YEARS THE ENROLLMENT DOUBLES

These are just the most pressing and immediate needs for space in which to carry on the work of class-room and laboratory instruction in this University, and I can hardly believe that the people of the State realize that since 1903, the date when I first became acquainted with the institution, our enrollment in the Departments at Columbia has more than doubled, while there has not been added a single building for class-room or laboratory purposes, if we exclude the small and inexpensive structures that have been erected at the Farm. But this is not all. If we are to adequately care for the health of the increasing number of young women who, in response to the demands of modern civilization, seek the advantages of higher education, a gymnasium for women is an absolute necessity. And I need hardly mention on this occasion, when not one-half of our students can be admitted to this hall, that the University needs an Auditorium with a seating capacity of at least 3000 in order to provide for gatherings of the entire membership of the institution, so as to maintain some unity in its life and prevent its spiritual interests from disintegration. Still another need is that of dormitories, both for men and women, so that students of the University may find adequate and hygienic living accommodations and so that living expenses may be kept at a moderate rate. Let us see to it that the University of Missouri never ceases to be the poor man's university.

This is the University of the people of Missouri. Individuals of wealth within the State might well add private benefactions to public munificence, knowing that any buildings erected here will be lasting monuments to their memories, and that the State will gladly provide for maintenance and for the administration of the trust. It is perhaps not fully known throughout Missouri how large a proportion of the University's property is the gift of the generous and idealistic spirit of the citizens of Columbia and Boone County, and they have magnanimously turned over this property to the uses of the State without leaving upon it even a permanent record of their names. May we not expect to find many citizens of the State who will emulate their noble example and supplement the bounty of the legislature? And to the legislators we would say: You are fortunate in having the means of supply or in being able to create them in large abundance. Visit the University. Examine into its minutest details. All its interests are yours as the representatives of the people. And when you become familiar with its work and its aims, I am sure you will plan for it largely, generously and abundantly as the crowning glory of the commonwealth. As I recall the history of what has already been accomplished, as I contemplate the resources of this great and noble State, I believe the legislature and the people will be content with nothing short of making this University worthy of the State, and that means making it the peer of any university in the land. This institution has already become recognized as one of the first universities of America and the leading institution of higher education in the whole Southwest, and the people of Missouri will wish to maintain and advance its standards for the sake of their sons and daughters, and at reasonable tuition fees, for the children of those Missouri pioneers who have gone out beyond her borders to develop the resources of this vast region. They will want to see here buildings, equipment, great teachers, and a mature and earnest student body. These are the factors that go to make up a great university; and these are the aspirations in whose strength the University of the State of Missouri now girds herself ardent for the tasks that lie before her.